

REMARKS

In the Office Action, claim 12 is rejected under 35 U.S.C. §112 as being indefinite, and claims 1, 2, 6-10 and 12 are rejected under 35 U.S.C. §102(b) as being anticipated by Florin et al., and claims 1, 3-7, 9-11 and 12-17 are rejected under 35 U.S.C. §102(e) as being anticipated by Johansen.

The gist of the instant invention is to provide a surface plasmon resonance sensor with high sensitivity. The surface plasmon resonance sensor comprises a prism having a surface on which a metallic layer is coated, a first dielectric layer having metallic nanoparticles formed on the metallic layer, a light source giving off a light to the prism, the light being reflected by the surface of the prism to form a reflected light and a light detector for detecting the reflected light. The dielectric layer having metallic nanoparticles is capable of enhancing the phenomenon of surface electromagnetic radiation so as to enhance the detecting sensitivity of the sensor significantly.

Florin et al. disclose a sensor formed by two metal films 6 and 10. It should be noted that both layers 6 and 10 are metal films. Johansen discloses a surface plasmon sensor comprising a surface on which a metallic layer 220 and a linker layer 240 are formed. The linker layer 240 can be an alkane thiol. Neither Florin et al. nor Johansen teaches or suggests a dielectric layer having metallic nanoparticles.

In response to the office action, claim 1 is amended to clearly point out the dielectric layer having metallic nanoparticles to distinguish over the cited prior arts n a

patentable way to overcome the rejections under 35 U.S.C. §102(b). Furthermore, the original term “metallic nanoparticle layer” is amended as “dielectric layer having metallic nanoparticle layer” to avoid any confusion about the nature of the dielectric layer and to overcome the rejection under 35 U.S.C. §112. Because the limitation as recited in claim 1 is neither disclosed nor anticipated by the cited prior arts. Applicants respectfully submit that the amended claim 1 is allowable. By virtue of dependency, claims 2-14 are also allowable. In the above amendment, claims 15-17 are also amended to include the dielectric layer having metallic nanoparticles in a similar way. Therefore, claims 15-17 are also allowable.

From the foregoing discussion, it is clear that the instant invention differs from the cited prior arts. The physical difference results in different effects and is not obvious. Claims 1-17 are in full condition for allowance. Applicants respectfully request that a timely Notice of Allowance be issued for this application.

Respectfully submitted,

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